

A Survey of World Wide Web Lists of Medical Schools

Aubrey T. Wright, A.B., Jeffrey T. Huber, Ph.D., Nunzia B. Giuse, M.D., M.L.S.
Active Digital Library, The Informatics Center, Vanderbilt University Medical Center, Nashville, TN

ABSTRACT

The objective of this study was to evaluate World Wide Web (WWW) lists of Universal Resource Locators (URLs) on one subject pertaining to medicine in order to evaluate them for completeness and accuracy. The WWW was searched for lists of medical school URLs and each list was checked for the above criteria. A separate list of medical schools was compiled by author A.W. for comparison. Results show that, at best, only 75% of the medical schools with available WWW pages are represented in the lists searched. This study indicates there is a need for further investigation of medical resource lists in order to evaluate their completeness and accuracy.

INTRODUCTION

Members of the health community are increasingly using the Internet as a tool of information dissemination and retrieval [1]. User-friendly WWW interfaces make retrieval of medical resources from diverse sources relatively easy [2]. Although many Internet resources are available, and although medical professionals and students attempt to use them, successfully locating relevant resources is a problem. The World Wide Web Worm often provides pointers that point to pointers to resources rather than to the actual resource itself. Therefore, an important concern is the number of lists being propagated by Web page owners, and the issue of their upkeep and validation. This study investigated WWW hypertext lists of medical schools to evaluate them for content and functionality of their links.

METHODS/RESULTS

Using Netscape 1.1b3, a total of four United States hypertext lists were located on the WWW that specified medical schools only. The group of medical

schools selected for this study were those that were among the 124 schools listed in the 50 United States in the AAMC 1994 directory. Each list was evaluated for completeness, functionality of the links, and correctness of the URLs, then compared to a validated list compiled by author A.W. The validated list was obtained by searching the WWW for URLs, verifying the links, and using e-mail correspondence when possible to investigate any questionable results. The results are summarized in Table I. In addition, the medical school lists were analyzed for overlap of content. It was found that the four lists had an overlap of ten URLs. Excluding Site (I), an overlap of 36 URLs was found between Site (II), Site (III), and Site (IV). The total coverage of medical school links from a compilation of all four lists encompasses 62 separate, functional URLs.

CONCLUSION

Index usefulness depends on completeness and accuracy. Web sites should not compile lists that they are unwilling or unable to update and verify periodically. Even a necessary resource such as this simple list of American medical school URLs has been found to be deficient on the WWW. This raises the question of how many other medical resource lists are incomplete or inaccurate, and points to the urgency of establishing forms of quality assurance for hypertext lists.

REFERENCES

- [1] Kleeberg, P. Medical Uses of the Internet. *Journal of Medical Systems*. (1993), 17:363-366.
- [2] McKinney, W.P., Wagner, J.M., Bunton, G., and Kirk, L.M. A Guide to Mosaic and the World Wide Web for Physicians. *M.D. Computing*. (1995), 12:109-141.

Table I. Four medical school indices were surveyed for completeness, functionality, and accuracy of contents. The overall percent of medical school links was then compared to the author's list.

	Site (I)	Site (II)	Site (III)	Site (IV)	Author list
Total links in index	83	57	50	47	72
Total functional links	58	57	49	47	72
Total actual medical school URLs	13	54	47	45	72
Med. school links/functional links	22%	95%	94%	96%	100%
Med. school links/Author links	18%	75%	65%	63%	--